

Local Hazard Mitigation Plan ANNEX

City of San Bruno

Introduction

The City of San Bruno is a moderately sized city in San Mateo County, California. The city is 12 miles south of San Francisco and adjacent to the San Francisco International Airport. The City has a population of 40,165 people, based on the 2000 census¹. In fiscal year 2006/2007 the City's operating budget was \$28,667,609. The City employs 233 full time employees and 65 temporary employees. The City provides both police and fire services.

The Planning Process

The process of preparing this plan was familiar to the City of San Bruno. The City has an Emergency Operations Plan last updated in 2003 that includes a discussion of fire, earthquake, flooding, and landslide hazards. In addition, the City routinely enforces the requirements of the California Environmental Quality Act (CEQA) which, since 1988, has required mitigation for identified natural hazards. The City's effort focused on building on these pre-existing programs and identifying gaps that may lead to disaster vulnerabilities in order to work on ways to address these risks through mitigation.

Many of the activities conducted by the City were fed into the planning process for the multi-jurisdictional plan. The City participated in various ABAG (Association of Bay Area Governments) workshops and meetings. In addition, the City has provided written and oral comments on the multi-jurisdictional plan. Finally, the City provided information on facilities that are viewed as "critical" to ABAG.

Key City staff met on these two occasions to identify and prioritize mitigation strategies appropriate for the City. Staff involved in these meetings included the Housing and Redevelopment Manager, Public Works Deputy Director, Police Lieutenant, and Fire Chief. At the first meeting, held on December 20, 2006, the general priorities and appropriate City departments were identified. The second meeting, held on February 5, 2007 identified preliminary budgets and potential funding sources for strategies designed as "High" priority. The City provided the opportunity for the public to comment on the DRAFT mitigation strategies selected by City staff at the City Council meeting on March 27, 2007. The resolution adopting the plan and strategies was approved by the City Council at the same meeting. The mitigation strategies will become an implementation appendix to the Safety Element of the City's Emergency Plan.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake-

¹ For complete Census information on this city, see <http://www.bayareacensus.ca.gov/>.

induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). These hazards also impact this community.

While the City has undertaken a number of general hazard mapping activities since the first Safety Element was prepared by the City, all of these maps are less detailed and are not as current as those shown on the ABAG website at <http://quake.abag.ca.gov/mitigation/>.

The City has had a number of landslides in the hills on the west side of the City, including one that damaged several homes in 1998. This additional hazard information is included in the plan.

Information on disasters declared in San Mateo County is at <http://quake.abag.ca.gov/mitigation/disaster-history.html>.

The City examined the hazard exposure of City urban land based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 3470 urban acres in the City

- ◆ Earthquake faulting – The San Andreas fault runs directly through the western part of the city. 330 acres are in the highest category of faulting.
- ◆ Earthquake shaking – 847 acres are in the highest category of shaking potential, in large part because the San Andreas fault runs through the western portion of the City.
- ◆ Earthquake-induced landslides – the California Geological Survey has not completed mapping of this hazard in the City of San Bruno. However, because few areas have been mapped as landslides, this hazard is viewed as similar to that posed by weather-related hazards.
- ◆ Earthquake liquefaction – 217 acres are in areas of moderate, high, or very high liquefaction susceptibility.
- ◆ Tsunamis – While tsunamis may be a hazard in the City of San Bruno, the mapping of the inundation area has not been completed at this time. However, if one assumes that a 42-foot tsunami enters the Golden Gate, it would be roughly 10 feet in San Bruno. The lowest elevation in San Bruno is 12 feet above sea level.
- ◆ Flooding – There are no parts of the city that are in an existing flood plain.
- ◆ Landslides- 44 acres are in areas of existing landslides.
- ◆ Wildfires- 56 acres are subject to wildfire threat (because of the urban nature of the City), but 2370 acres are in wildland-urban interface threat areas.
- ◆ Dam Inundation – There is no part of the city subject to dam inundation.
- ◆ Drought – all 3470 acres are subject to drought.

The City also examined the hazard exposure of infrastructure based on the information on ABAG's website at <http://quake.abag.ca.gov/mitigation/pickdbh2.html>. Of the 239 miles of roadway in the City,

- ◆ Earthquake faulting – 12 miles of roadway are in the highest category of faulting.
- ◆ Earthquake shaking – 95 miles of roadway are in the highest two categories of shaking potential.
- ◆ Earthquake-induced landslides – the California Geological Survey has not completed mapping of this hazard in the City of San Bruno. However, 50 miles of roads are in existing landslide areas
- ◆ Earthquake liquefaction – 5 miles of roadway are in areas of moderate, high, or very high liquefaction susceptibility.

- ◆ Tsunamis – While tsunamis may be a hazard in the City of San Bruno, the mapping of the inundation area has not been completed at this time. However, if one assumes that a 42-foot tsunami enters the Golden Gate, it would be roughly 10 feet in San Bruno. The lowest elevation in San Bruno is 12 feet above sea level.
- ◆ Flooding – There are no parts of the city in the 100 year flood plain.
- ◆ Landslides – 50 miles of roads are in areas of existing landslides.
- ◆ Wildfires – 3 miles of roadway are subject to wildfire threat and 76 miles of roads are in wildland-urban interface threat areas.
- ◆ Dam Inundation – No part of the city is in a dam inundation area.
- ◆ Drought – is not a hazard for roadways.

Finally, the City examined the hazard exposure of critical health care facilities, schools, and city-owned buildings based on the information on ABAG's website at

<http://quake.abag.ca.gov/mitigation/pickerit.html>. Of the critical facilities in the City,

- ◆ Earthquake faulting – 1 critical facility and 3 schools are in the highest potential faulting area.
- ◆ Earthquake shaking – all 16 schools, both fire stations, City Hall and 5 other critical facilities are in the highest two categories of shaking potential.
- ◆ Earthquake-induced landslides – the California Geological Survey has not completed mapping of this hazard in the City of San Bruno. However, this is unlikely to be an issue because no critical facilities are in existing landslide areas.
- ◆ Earthquake liquefaction – while no critical health care facilities, or city-owned facilities are in areas of moderate, high, or very high liquefaction susceptibility, two schools are located in these areas.
- ◆ Tsunamis – While tsunamis may be a hazard in the City of San Bruno, the mapping of the inundation area has not been completed at this time. However, if one assumes that a 42-foot tsunami enters the Golden Gate, it would be roughly 10 feet in San Bruno. The lowest elevation in San Bruno is 12 feet above sea level.
- ◆ Flooding – no critical health care facilities, schools, or city-owned facilities are in either the 100-year flood plain or in other flood-prone areas.
- ◆ Landslides – no critical health care facilities, schools, or city-owned facilities are in areas of existing landslides.
- ◆ Wildfires – 14 schools and 4 critical facilities are in wildland-urban interface threat areas.
- ◆ Dam Inundation – no critical health care facilities, schools, or city-owned facilities are in an area subject to dam inundation.
- ◆ Drought – Drought will not affect city buildings directly. However, the city does operate a water-supply distribution system.

The City plans to work with ABAG during 2007 to improve the risk assessment information being compiled by ABAG by providing information on unreinforced masonry buildings and soft-story apartments located in the City.

Drought, though a potential problem in the City, is not fully assessed. The City will work with ABAG and various water supply agencies on this issue.

The City plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure, and critical facilities, which might result from any of the hazards previously noted.

As these impacts are not fully developed, the City has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes (particularly shaking) and wildfire pose a significant risk for potential loss.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, City of San Bruno staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was discussed at a meeting of a City Police Lieutenant, Fire Chief, Housing and Redevelopment Director and the Public Works Deputy Director on February 5, 2007. At the meeting, all of the mitigation strategies were reviewed. The tentative decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

Over time, the City of San Bruno is committed to developing better hazard and risk information to use in making those trade-offs. This effort is not intended to create a disaster-proof region, but a disaster-resistant one. In addition, several of the strategies are existing City programs.

The draft priorities were provided to the City Council on March 27, 2007. The public was provided with an opportunity to comment on the DRAFT priorities. The final strategies (as shown in the attached Table) will become an *Implementation Appendix* to the City's *Safety Element*.

The City examined the hazard exposure information to City-owned critical facilities supplied by ABAG. The City has determined that there are several critical facilities that do not meet current earthquake standards. These include recreation center, library, corporation yards, water and wastewater infrastructures and both fire stations. (The City completed the retrofit of its City Hall in 1998.) The City Council adopts a capital improvement program budget in each year to identify necessary improvements or replacement.

The Plan Maintenance and Update Process

The Fire Chief will ensure that monitoring of this Annex will occur. The plan will be monitored on an on-going basis. The major disasters affecting the community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. The Annex will be a discussion item on the agenda of the meeting of City department heads at least once a year in April. At that meeting, the department heads will focus on evaluating the Annex in light of technological and political changes during the past year or other significant events. This group will be responsible for determining if the plan should be updated.

The City of San Bruno is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The City Fire Chief will contact ABAG two years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the City again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The public will continue to be involved whenever the plan is updated, and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, the City will provide the opportunity for the public to comment on the updates. A public notice will be posted prior to the meeting to announce the comment period and meeting logistics.